

What is claimed is:

1. A compression process for compressing an image and storing the compressed image on a storage medium of a computer system, wherein a plurality of compression techniques are utilized to compress the image, comprising:

segmenting the image into a plurality of n segments;

5 analyzing a first segment of the plurality of segments to determine a first optimal compression for the first segment;

applying the first compression technique to the first segment;

storing the compressed first segment in the storage medium;

10 analyzing a subsequent segment in the plurality of segments to determine a second optimal compression for the subsequent segment;

applying the second compression technique to the subsequent segment;

storing the compressed subsequent segment in the storage medium; and

15 repeating the steps of analyzing, applying and storing for each segment in the plurality of segments, wherein the nth segment is compressed by an nth compression technique.

2. A compression process as claimed in claim 1, wherein the first compression technique and the second compression technique are different.

3. A compression process as claimed in claim 1, wherein at least two different compression techniques are applied to the plurality of segments.

4. A compression process as claimed in claim 1, wherein storing the compressed segment comprises writing a data file comprising data description members and display instruction members.

5. A compression process as claimed in claim 4, wherein storing the compressed segment comprises writing a data file further comprising memory management.

6. A compression process as claimed in claim 4, wherein storing the compressed segment comprises writing a data file selected from the group consisting of memory management, data description members and display instruction members.

7. A compression process for compressing an image stream having a plurality of images and storing the compressed images on a storage medium of a computer system, wherein a plurality of compression techniques are utilized to compress each image, comprising:

5 segmenting a first image into a plurality of n segments;
analyzing a first segment of the plurality of segments to determine a first optimal compression for the first segment;

10 applying the first compression technique to the first segment;
storing the compressed first segment in the storage medium;
analyzing a subsequent segment in the plurality of segments to determine a second optimal compression for the subsequent segment;

15 applying the compression technique to the subsequent segment;
storing the compressed subsequent segment in the storage medium;
repeating the steps of analyzing, applying and storing for each segment in the plurality of segments;

20 segmenting each subsequent image into a plurality of segments; and
repeating the steps of analyzing, applying and storing for each segment in each subsequent image.

8. A compression process as claimed in claim 1, wherein the first compression technique and the second compression technique are different.

9. A compression process as claimed in claim 1, wherein at least two different compression techniques are applied to the plurality of segments.

10. A compression process as claimed in claim 1, wherein storing the compressed segment comprises writing a data file comprising a memory manager, data description members and display instruction members.

11. A file structure for storing compressed data in a data file, wherein the data file can be displayed on a playback device having a predefined amount of memory, comprising:

5 a memory management command in a first position in the data file, wherein the memory management command instructs the playback device to perform a predefined operation;
a set of data description members; and
a set of display instructions, wherein the display instructions include a starting data point, and size parameters of the data.

12. A file structure as claimed in claim 11, wherein the data description members, comprise:

an image identifier;
an image shape identifier; and
10 identifier of the number of fill styles, wherein the fill styles define the type of data in the segment;
a data draw command, wherein the data draw command instructs the playback device to display the data; and
a first affine transform, wherein the transform defines scaling, rotating or skewing of the data contained within the segment.

13. A file structure as claimed in claim 12, wherein the fill styles are selected from a group consisting of solid color data, gradient data, bitmap data, or pixel data.

14. A file structure as claimed in claim 13, further comprising a second affine transform, wherein the transform defines scaling, rotating or skewing of the segment.